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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,400	05/19/2005	Campbell Richard James	FBRI-23476	1777

26389 7590 03/21/2007
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EXAMINER

HUNNINGS, TRAVIS R

ART UNIT	PAPER NUMBER
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2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/506,400	Applicant(s) JAMES, CAMPBELL RICHARD	
	Examiner Travis R. Hunnings	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 16, the phrase "relative low power" renders the claim indefinite because it would be unclear to one of ordinary skill in the art what would constitute "relative low power". See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-12 and 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorden et al. (Sorden; US Patent 5,311,197) in view of Doshay (US Patent 6,324,393).

Regarding claim 1, Sorden discloses *Event-Activated Reporting Of Vehicle Location*, that has the following claimed limitations:

The claimed system including signal generating means to generate a signal incorporating information which enables the location of the signal to be established is

met by the present location information of the vehicle being transmitted by the signal transmitter (column 6, line 50 – column 7, line 30);

The claimed alarm signal transmitter operable on occurrence of a defined event to transmit an alarm signal incorporating said signal to a receiving station which provides the emergency center with information relating to the signal transmission is met by the sensors carried on the vehicle determining that one or more abnormal situations has occurred and causing the signal transmitter to transmit the location of the vehicle (column 6, line 50 – column 7, line 30);

The claimed position determining means to establish its location is met by the DMS antenna receiving DMS signals to determine the vehicle's location (column 6, line 50 – column 7, line 30).

However, Sorden does not specifically disclose the claimed homing signal transmitter which simultaneously transmits a homing signal either continuously or at periodic intervals. Doshay discloses *Auto Locating Emergency Rescue Transmitter (ALERT)* that teaches an emergency signal generator that broadcasts an RF signal for guiding rescuers to the location of the vehicle (column 1, line 57 – column 2, line 33). Adding a emergency signal generator to Sorden that would guide rescuers to the vehicle through RF signals would increase the likelihood that the vehicle is found and therefore increase the overall safety that the device provides to the user. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Sorden according to the teachings of Doshay to include an emergency signal generator that broadcasts a homing signal.

Regarding claim 2, it would have been obvious that the transmitted signal of Sorden would be coded in some way in order for the receiver to interpret the signal against other signals in the area and random background noise.

Regarding claim 3, the claimed position determining means comprises a GPS unit that provides position information is met by the DMS signal being provided from GPS satellites (abstract).

Regarding claim 5, it would have been obvious to use any well known form of position determination including a cellular telephone network because it is well known in the art for cellular networks to use triangulation to determine the position of transmitters in their network.

Regarding claim 6, the claimed event including accident conditions is met by the abnormal situation being detected being a collision or crash (column 6, line 50 – column 7, line 30).

Regarding claim 7, the claimed system components being mounted in a vehicle is met by the device being mounted in a vehicle (column 6, line 50 – column 7, line 30).

Regarding claim 8, it is well known in the art for electronic devices to carry a backup battery or power source to provide for the event that their primary power source no longer functions. Therefore it would have been obvious to have a backup battery to provide power to the device.

Regarding claim 9, the claimed actuating means being one or more accelerometers, smoke detectors, motion detector, air-bag actuator, seat belt retractor or manual switch is met by the sensors for detecting an abnormal condition (column 6, line 50 – column 7, line 30).

Regarding claim 10, the claimed alarm signal transmitted incorporates additional information including accident severity, vehicle identification, passenger numbers, vehicle attitude and updated positional information if the vehicle is in motion is met by the position and other relevant information that is transmitted by the device (column 7, lines 31-47).

Regarding claim 11, the claimed homing signal transmission is a radio beacon signal transmitted at regular intervals is met by the signal being a radio frequency signal (Doshay: column 1, line 57 – column 2, lines 33).

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Regarding claim 12, the claimed radio beacon transmission includes GPS position location information is met by the signal providing GPS information (Doshay: column 1, line 57 – column 2, lines 33).

Regarding claim 16, the claim is interpreted and rejected as claim 1 stated above.

Regarding claim 17, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 18, the claim is interpreted and rejected as claim 5 stated above.

Regarding claim 19, the claim is interpreted and rejected as claim 6 stated above.

Regarding claim 20, the claim is interpreted and rejected as claim 7 stated above.

Regarding claim 21, the claim is interpreted and rejected as claim 8 stated above.

Regarding claim 22, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 23, the claim is interpreted and rejected as claim 10 stated above.

Regarding claim 24, the claim is interpreted and rejected as claim 11 stated above.

Regarding claim 25, the claim is interpreted and rejected as claim 12 stated above.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorden in view of Doshay and further in view of Jeong (Jeong; US Patent Application Publication 2001/0006373).

Regarding claim 4, Sorden and Doshay disclose all of the claimed limitations except for the claimed position determining means comprising satellites programmed to be able to detect the homing signals transmitted by the homing signal transmitter and to provide a relatively exact location of the transmitter. Jeong discloses *Vehicle Tracking System* that teaches a system for determining the location of a vehicle through satellites that detect the location of a vehicle and transmitting that information to rescuers

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(paragraph 7). Altering the homing signal transmitter of Sorden and Doshay to transmit the information to satellites instead of through radio frequency would give the user an additional way to contact rescuers and increase the ability of the rescuers to find the distressed motorist. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Sorden and Doshay according to the teachings of Jeong to transmit the homing signal to satellites in order to provide a location of the vehicle.

8. Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorden in view of Doshay and further in view of Bartlett et al. (Bartlett; US Patent 6,323,766).

Regarding claim 13, Sorden and Doshay disclose all of the claimed limitations except for the claimed homing signal transmitter including a strobe or other bright pulsing light or other periodic light source or sound source to attract attention. Bartlett discloses *Vehicle Hazard Light System* that teaches a system with an impact sensor that triggers an emergency flasher relay for flashing the vehicle lights (column 1, lines 4-12). Adding a system for automatically triggering flashing of the lights of Sorden and Doshay would increase the chances of rescuers finding/noticing the vehicle in distress and would therefore increase the overall safety that the device provides. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to

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modify the device disclosed by Sorden and Doshay according to the teachings of Bartlett to include a flashing light source to attract attention.

Regarding claim 26, the claim is interpreted and rejected as claim 13 stated above.

9. Claims 14 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorden in view of Doshay and further in view of Baer et al. (Baer; US Patent 5,920,827).

Regarding claim 14, Sorden and Doshay disclose all of the claimed limitations except for the claimed control circuit that monitors battery charge and adjusts the frequency of transmission rates based on the monitored battery charge. Baer discloses *Wireless Weather Station* that teaches a periodically broadcast signal powered by a battery source with circuitry for monitoring the battery charge and adjusting the rate of transmission based on the charge left in the battery (column 2, lines 53-57). Adding circuitry to monitor the battery charge and adjust the transmission rate of the location signal would increase the usefulness of the device by allowing it to continue to broadcast the signal, albeit at a lower frequency, even while the battery loses its power. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Sorden and Doshay according to the

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teachings of Baer to include circuitry to monitor the charge of the battery and alter the frequency of transmission based on the battery charge.

Regarding claim 27, the claim is interpreted and rejected as claim 14 stated above.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorden in view of Doshay and further in view of Kimball et al. (Kimball; US Patent 3,710,313).

Regarding claim 15, Sorden and Doshay disclose all of the claimed limitations except for the claimed alarm signal transmitter and the homing signal transmitter are a single transmitter unit switched between operational modes as required. Kimball discloses *Emergency Warning System* that teaches a single transmitter with multiple transmission modes (column 1, lines 38-57). Combining the two transmitters of Sorden and Doshay into a single unit with multiple transmission modes would save overall space and allow the device to be more flexible in mounting inside of a vehicle.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Sorden and Doshay according to the teachings of Kimball to combine both transmitters into a single unit with multiple transmission modes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH


BENJAMIN C. LEE
PRIMARY EXAMINER